

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2003P07420WO	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/050948	International filing date (day/month/year) 27.05.2004	Priority date (day/month/year) 30.05.2003
International Patent Classification (IPC) or national classification and IPC		
Applicant SIEMENS AKTIENGESELLSCHAFT		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>3</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																								
Name and mailing address of the IPEA/EP	Authorized officer																								
Facsimile No.	Telephone No.																								

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International application No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-4, 6, 7 as originally filed/furnished
- pages* 5, 5a received by this Authority on 29.08.2005 with letter of 28.08.2005
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 2, 3 as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1 received by this Authority on 31.03.2005 with letter of 29.03.2005
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/1 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-3	YES
	Claims		NO
Inventive step (IS)	Claims	1-3	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-3	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

This report considers the following search report citations:

- D1: MINGHAI XU ET AL: "Implementation techniques of intserv/diffserv integrated network" IEEE, Vol. 1, 9 April 2003 (2003-04-09), pages 231-234
- D2: WO 01/03383 A
- D3: JIN-CHEOL KIM ET AL: "A dynamic admission control scheme in a diffserv domain" IEEE, 26 May 2002 (2002-05-26), pages 183-187, XP010596794.

The application concerns a method for forwarding IP packets to an external control component of a network node.

The method makes it possible to forward Internet protocol packets to a control component assigned to one network node in an IP-packet-switching communications network comprising a plurality of network nodes, wherein IP packets are received, recognized, evaluated and processed along interfaces of the network node. The problem to be solved by the present invention is that of

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

providing a method by which received IP packets with interface information of the receiving network node can be passed on to an external control component. In this way a control component "placed at the disposal of" a network node can take over a wide range of the control tasks of the network node.

This problem is solved by the fact that in an In-Band IP signalling packet received and recognized by an interface of the network node and characterized by an entry in the protocol field of the header field of the IP packet, a value assigned to the relevant receiving interface, which differs from the values of the corresponding other interfaces, is entered in a particular field of the header field, or IP header, of the IP packet and the modified packet is rerouted/delivered to the control component.

The prior art describes a number of different systems and methods for forwarding of IP packets to an external control components of a network node.

For instance, document D1 discloses improvements for integrated services which are a part of IntServ/DiffServ networks. To this end, Service-Level specifications are suggested wherein particular DSCP values are provided for signalling messages. Document D2 describes a system and a method for differentiated service marking for

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Unicast and Multicast applications, with the possibility of sending out control commands per device (per hop).

Document D3 also discloses control possibilities in Intserv/Diffserv networks having defined DSCP values for different signalling messages.

However, the prior art (D1-D3) does not disclose a method according to which one control component is assigned to one network node each, nor one wherein, by an entry into the header field of the IP packet, interfaces of the relevant network node can be adjusted individually by the assigned control component.

The features of claim 1 are not disclosed in the prior art and also cannot be derived directly from the above documents.

Consequently, independent claim 1 is inventive relative to the prior documents D1 to D3.

Dependent claims 2-3 comprise advantageous embodiments and therefore likewise meet the requirements of PCT Article 33(3).

Consequently, claims 1-3 satisfy the requirements of PCT Article 33.